

METHODS AND COMPOSITIONS FOR MODULATING T LYMPHOCYTES

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ABSTRACT OF THE DISCLOSURE

This invention provides novel methods and compositions for modulating T cell differentiation and T cell responses. The modulators are identified by screening test compounds for ability to modulate an inositol 1,4,5-trisphosphate 3-kinase (IP3K). The
10 IP3K modulators can be further examined for their activity in modulating development of progenitor T cells (e.g., CD4⁺/CD8⁺ double positive T cells) into mature CD4⁺ or CD8⁺ single positive T cells. Pharmaceutical compositions comprising these T cell modulators can be administered to a subject to modulate T cell immune responses, to suppress inflammations, and to treat disease conditions such as autoimmune diseases, graft rejection
15 or allergies.